Test Bed of Test Beds

Don Berchoff
Office of Science and Technology

Overview

- The challenge
- The gap
- The concept
- How

The Challenge

- How do we create an environment that allows us to test concepts that span multiple test beds?
- Current test bed paradigm is very good at exploring advances aligned along National Center or Service lines
  - Example: Severe weather test bed
- Challenge #1: how to gain full interoperability across National Centers, service area boundaries and eliminate stove pipes
- Challenge #2: how do we build a common weather picture that exploits ever increasing volumes of data, greater refresh requirements and supports decision support systems?

The Gap

- Current test bed infrastructure is aligned along organization and service area lines
- Test beds aren’t built off of common infrastructure, networking and services

The Concept

- Link test beds to explore new concepts that cross service and organizational boundaries,
  - Example : Refinements to the forecast process that accommodate greater volumes of observational data, probabilistic information and the need to keep forecast information representative
- Establish a capability that simulates workload within a WFO, and between WFOs and National Centers that allow testing and analysis of forecast and warning workload management[1]
  - Similar to paradigm used by airline industry to train aircrews
- Establish capability that tests DSS functions

[1] First proposed by Jud Ladd, SR

How?

- Build test beds off common infrastructure, networking and services
- Link test beds using common platforms, networking and data services provided by AWIPS II
- Develop a “testbed of testbeds” to prototype, demonstrate future forecast process and services activities across the enterprise to position NWS for future mission growth